in FIG. 11. As will now be described, lateral displacement of the upper clutch rod 110 and lower clutch rod 111 disengages the trays from the motors.

[0059]   Each of the gears 108-1 through 108-12 has associated therewith a moveable gear 117-1 through 117-12, respectively, seen best in FIGS. 13, 14, and 15 The moveable gears 117-1 through 117-12 are free to move along their respective shafts while at all times being drivable by their associated gear 108-1 through 108-12, respectively. That may be accomplished, as seen in FIGS. 13 and 14, by providing gears 108-1 through 108-12 with a hub 120-1 through 120-12 having a flattened or shaped exterior circumference which mates with a similarly shaped interior circumference of the moveable gears 117-1 through 117-12, respectively.

[0065]   Turning first to FIGS. 16, 17 and 18, two eight bit words are received in FIG. 16 from the control computer 32. The first eight bit word 150 represents the distance a drawer is to travel. From the second eight bit word, four bits 152 represent a drawer select signal, a bit 154 is representative of a start transaction, a bit 155 is representative of direction, a bit 156 is representative of a "clear error" signal, and a bit 157 is representative of a "retry" signal. The distance bits 150 are input to a counter 158 (FIG. 18A). A comparator 160 (FIG. 18C) is responsive to the counter 158. The comparator 160 is also responsive to a plurality of switches 162 which set a value to which the comparator compares the output of the counter 158.

[0068]   FIG. 19A has in the upper portion thereof a motor enable path 170 which is responsive to a "count complete/enable" signal from FIG. 18A as well as a "delayed start transaction/retry" signal from FIG. 18C. Those two signals are processed as shown in motor enable path 170 to produce a "master motor enable" signal.

[0069]   In the middle of FIG. 19A, a flip-flop 172 is provided which is responsive to the motor enable path 170 as well as the "delayed start transaction/retry" signal available from FIG. 18C. The flip-flop 172 produces the signals "hardware busy" and "command lock out".

[0070]   Finally, in FIG. 19B, a circuit path 174 is provided for producing an "error" signal in response to an "overload detect" signal (indicative of an overcurrent condition) input to the circuit path 174. In response to the detection of an overcurrent condition, the "error" signal is generated.